0043914

STATE ENVIRONMENTAL POLICY ACT (SEPA)

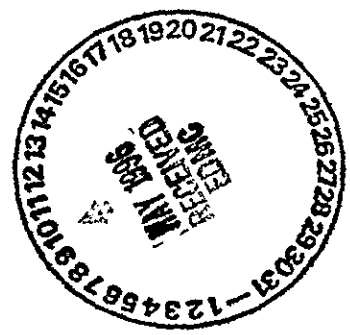
ENVIRONMENTAL CHECKLIST FORMS

FOR

HYDROTEST, MAINTENANCE, AND CONSTRUCTION DISCHARGES

November 1995

REVISION 0



WASHINGTON ADMINISTRATIVE CODE
ENVIRONMENTAL CHECKLIST FORMS
[WAC 197-11-960]

A. BACKGROUND

1. Name of proposed project, if applicable:

Hanford Site Hydrotest, Construction, and Maintenance Discharges. This project is a State Waste Discharge Permit Application to discharge hydrotest, construction, and construction waste water streams.

2. Name of applicants:

U.S. Department of Energy, Richland Operations Office (DOE-RL); and Westinghouse Hanford Company (WHC).

3. Address and phone number of applicants and contact persons:

U.S. Department of Energy
Richland Operations Office
Post Office Box 550
Richland, Washington 99352

Contact Persons:

J. E. Rasmussen, Director
Environmental Assurance, Permits,
and Policy Division
(509) 376-5441

4. Date checklist prepared:

October 1995

5. Agency requesting the checklist:

Washington State
Department of Ecology
1315 W. 4th Avenue
Kennewick, Washington 99336-6018

6. Proposed timing or schedule: (including phasing, if applicable):

Proposed actions are ongoing in accordance with the Ecology Consent Order, DE 91NM-177, (216 Consent Order). Future additions will be required to comply with the conditions stated in the Categorical WAC-173-216 Permit, when approved.

7. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

   A Categorical WAC-173-216 State Waste Discharge Permit is being obtained for hydrotest, construction, and maintenance discharges. Future waste streams may be added if they meet all criteria in the categorical permit prior to discharge.

8. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

   General Hanford Site environmental information is found in *Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNL-6415, Revision 7, Pacific Northwest Laboratory, 1995, Richland, Washington.

   National Environmental Policy Act (NEPA) documentation for these actions is generally covered by Categorical Exclusions (CX) as found in 10 Code of federal Regulations 1021, Subpart D, Appendices A and B. Some of these have been approved by DOE for site-wide use including: B1.3, Routine Maintenance; B1.6, Installation/modification of retention tanks; B1.15, Construction/modification of small-scale support buildings; and B1.22, installation and modification of mobile office facilities.

9. **Do you know whether applications are pending for government approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

   No.

10. **List any government approvals or permits that will be needed for your proposal, if known.**

    A Categorical WAC-173-216 Permit will be required. See item 7 above.

11. **Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.**

    This proposal is for discharge of hydrotest, maintenance and construction waste water discharges throughout the Hanford site. These waters come from four sources:

    a. Raw untreated water from the Columbia River.

    b. Potable water from the Columbia River. This is Columbia River water converted into sanitary or potable water through a conventional water treatment process.

c. Potable water from groundwater. This is water pumped from deep wells and converted into sanitary or potable water through a conventional water treatment process.

d. Demineralized water. This is sanitary water that is demineralized by passing over a filtration bed and through a mixed bed ion exchange column.

Examples of hydrotest discharges are from pressure tests or other system certification procedures. Such tests usually done as part of acceptance testing during construction of a new facility or as part of routine integrity testing, upgrading, troubleshooting, or repairing of an existing system. Development testing is performed to provide or develop design information concepts or criteria.

Example maintenance discharges that are normally performed on a routine basis would be drainage or flushing activities from basins, sumps, pumps, pipe systems, and reservoirs.

Construction discharges are classified as discharges taking place during the construction phase of a project. Example construction discharges include water used for concrete washing or curing and for the cleaning of concrete trucks. Pressure washing is the cleaning of parts or surfaces of rust, dirt, and grit prior to painting, welding, or bonding.

12. **Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

The Hanford Site covers approximately 1,450 square kilometers (560 square miles) of semiarid land that is owned by the U.S. Government and managed by the U.S. Department of Energy, Richland Operations Office (DOE-RL). The Hanford Site is located northwest of the city of Richland, Washington. The city of Richland adjoins the southeastern most portion of the Hanford Site boundary and is the nearest population center.

Activities on the Hanford Site are centralized in numerically designated areas. The 100 Area, located along the Columbia River, contain deactivated reactors. The processing units are in the 200 Areas, which are on a plateau approximately 11 kilometers (7 miles) from the Columbia River. The 300 Area, located adjacent to and north of Richland, contains research and development laboratories. The 400 Area, 8 kilometers (5 miles) northwest of the 300 Area, contains the Fast Flux Test Facility previously used for testing liquid metal reactor systems. The 600 Area covers all locations not specifically given an area designation. Adjacent to the north of Richland, the 1100 Area contains offices associated with administration, maintenance, transportation, and materials procurement and distribution. The 3000 Area, located at the

north end of Richland, contains offices and maintenance shops. Additional administrative offices are located in the 700 Area in downtown Richland.

The applicability of the State Waste Discharge Permit Application to discharge hydrotest, construction and maintenance waste water streams is limited to activities conducted by DOE-RL and its contractors on the Hanford Site, and excludes activities conducted by others on lands covered by leases, use permits, easements and other agreements whereby land is used by parties other than DOE-RL. For example, this application does not cover activities on state owned or leased lands, lands owned by the Bonneville Power Administration, lands leased to the Washington Public Power Supply System, US Ecology and the Ashe Substation or similarly leased lands not under the management of DOE-RL.

TO BE COMPLETED BY APPLICANT

EVALUATIONS FOR AGENCY USE ONLY

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other_____.

Flat

b. What is the steepest slope on the site (approximate percent slope)?

The general slope of land on the Hanford site is generally less than 2 percent.

c. What general types of soils are found on the site? (for example, clay, sandy gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

There are 15 different types of soil on the Hanford Site. The vast majority of the soil where activities would take place is classified as sand to sandy loam. For detailed information about soils on the Hanford Site see *Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNL-6415, Revision 7, Pacific Northwest Laboratory, 1995, Richland, Washington.

d. **Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

Hanford Site soils are generally stable although sand is affected by blowing winds.

e. **Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.**

Filling and grading ordinarily take place during construction activities but are not normally part of actual testing and water discharges.

f. **Could erosion occur as a result of clearing, construction, or use? If so, generally describe.**

Due to the soil types and dry climate, erosion is not expected. Water discharges would soak into the soil at the place of discharge.

g. **About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

Impervious surfaces are often constructed during construction projects but are not ordinarily part of actual testing and water discharges

h. **Proposed measures to reduce or control erosion, or other impacts to the earth, if any:**

None

2. **Air**

a. **What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approx. quantities, if known.**

Vehicles used in these activities would produce minor amounts of air emissions in the form of exhaust gases.

b. **Are there any off-site sources of emissions or odors that may affect your proposal? If so, generally describe.**

No.

c. **Proposed measures to reduce or control emissions or other impacts to the air, if any?**

None.

3. **Water**

a. **Surface**

1) **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

The proposed actions would occur on the Hanford site but would not discharge into the Columbia River.

2) **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

Water discharges may rarely be called for in existing systems within 200 feet of the Columbia River. No plans are available for as yet unplanned hydrotest, maintenance, or construction activities that may arise in the future.

3) **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

No fill or dredge material would be involved.

4) **Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**

Water from the Columbia River and groundwater may be the source of some flushes for hydrotesting, construction, and maintenance discharges.

5) **Does the proposal lie within a 100-year floodplain? Note location on the site plan.**

The proposed actions would not take place within the 100 year floodplain.

6) **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

No discharge of waste materials to surface waters would occur.

b. **Ground**

1) **Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.**

By nature hydrotest, maintenance, and construction discharges would release water to the ground. The source of some of this water may be from wells.

2) **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

None.

c. **Water Run-off (including storm water)**

1) **Describe the source of run-off (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

There is no stormwater system for the collection of the hydrotest, construction, and maintenance discharges. Stormwater generally seeps into the soil and evaporates due to the dry climate.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No.

d. Proposed measures to reduce or control surface, ground, and run-off water impacts, if any:

None.

4. Plants

a. Check or circle the types of vegetation found on the site.

___ deciduous tree: alder, maple, aspen, other
___ evergreen tree: fir, cedar, pine, other
_X_ shrubs
_X_ grass
___ pasture
___ crop or grain
___ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
___ water plants: water lily, eelgrass, milfoil, other
_X_ other types of vegetation

The Hanford Site contains plants typical of a desert with a shrub-steppe habitat. For detailed information about vegetation on the Hanford Site see *Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNL-6415, Revision 7, Pacific Northwest Laboratory, 1995, Richland, Washington.

b. What kind and amount of vegetation will be removed or altered?

None.

c. List threatened or endangered species known to be on or near the site.

Each Hanford Site location would have biological resource surveys conducted before beginning. Activities would not take place if threatened or endangered species were determined to be present.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

No landscaping would be called for.

5. Animals

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds,
other:.....
mammals: deer, bear, elk, beaver,
other:.....
fish: bass, salmon, trout, herring, shellfish,
other:.....

Many species of birds and animals can be found on the Hanford Site. Due to the disturbed nature of the locations on the Hanford site where the proposed activities would take place, it is not expected that the discharges would adversely impact these species. For detailed information about animals on the Hanford Site see *Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNL-6415, Revision 7, Pacific Northwest Laboratory, 1995, Richland, Washington.

b. List any threatened or endangered species known to be on or near the site.

Of the two federal- and state-listed endangered species observed on the Hanford Facility, the bald eagle is a regular winter visitor, occurring along some areas on the Columbia River, and the peregrine falcon is an uncommon visitor. The state listed American white pelican is an uncommon seasonal resident along the Columbia River. No federal or state listed endangered species is likely to occur in the areas where hydrotest, maintenance and construction discharges would take place. However, ecological resource reviews would be conducted before tests would be allowed to begin.

c. Is the site part of a migration route? If so, explain.

The Hanford Site and the adjacent Columbia River are part of the broad Pacific Flyway for waterfowl migration.

d. Proposed measures to preserve or enhance wildlife, if any:

None.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

None.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Not applicable.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

No.

1) Describe special emergency services that might be required.

Hanford Site security, fire response, and ambulance services are on call at all times in the event of an onsite emergency.

2) Proposed measures to reduce or control environmental health hazards, if any:

None.

b. Noise

1) What type of noise exists in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

2) **What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.**

There could be minor noise from some water discharging operations.

3) **Proposed measures to reduce or control noise impacts, if any:**

None.

8. **Land and Shoreline Use**

a. **What is the current use of the site and adjacent properties?**

Hydrotest, construction and maintenance water discharges would be a normal part of Hanford Facility Operations. Commercial activities on the Hanford Facility include a nuclear power plant and a State of Washington-administered low-level burial area operated by US Ecology. Public access to the Hanford Facility is limited.

b. **Has the site been used for agriculture? If so, describe.**

No portion of the Hanford Site has been used for agricultural purposes since 1943.

c. **Describe any structures on the site.**

Hanford site structures are many and varied, although most are contained within fenced, developed areas.

d. **Will any structures be demolished? If so, what?**

No.

e. **What is the current zoning classification of the site?**

The Hanford Site is zoned by Benton County as an Unclassified Use (U) district.

f. What is the current comprehensive plan designation of the site?

The 1985 Benton County Comprehensive Land Use Plan designates the Hanford Site as the "Hanford Reservation." Under this designation, land on the Site may be used for "activities nuclear in nature." Non-nuclear activities are authorized "if and when DOE approval for such activities is obtained."

Future use of the Hanford Site is currently being considered by the DOE, but final decisions are not expected to be made until the year 2001.

g. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

The Hanford site contains an area designated as the Hanford Reach of the Columbia River. Under Public Law 100-605, "Study of the Hanford Reach of the Columbia River," the National Park Service would be requested to review any activities which might take place within this area.

i. Approximately how many people would reside or work in the completed project?

Does not apply.

j. Approximately how many people would the completed project displace?

Does not apply.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Does not apply.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Does not apply. (Refer to answer to Checklist Question B.8.f. and h)

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

None.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

No new structures are proposed.

b. What views in the immediate vicinity would be altered or obstructed?

None.

c. Proposed measures to reduce or control aesthetic impacts, if any:

None.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. **Proposed measures to reduce or control light and glare impacts, if any:**

None.

12. **Recreation**

a. **What designated and informal recreational opportunities are in the immediate vicinity?**

The only recreational opportunities in the area involve the Columbia River (e.g., boating, and fishing).

b. **Would the proposed project displace any existing recreational uses? If so, describe.**

No.

c. **Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any?**

None.

13. **Historic and Cultural Preservation**

a. **Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.**

The retired B Reactor has been placed on the National Register of Historic Places, but would not be disturbed by the proposed action. The historic status of other Hanford Site structures is in the process of being determined on a case-by-case basis as the need arises. Cultural reviews would be conducted each time before a hydrotest would be conducted in order to protect the resources. Additional information regarding the cultural resources on the Hanford Site environment can be found in *Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNL-6415, Revision 7, Pacific Northwest Laboratory, 1995, Richland, Washington.

b. **Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.**

Although the area adjacent to the Columbia River has been found to be rich in cultural resources, the proposed action would not effect undisturbed

areas. Additional information regarding this can be found in *Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNL-6415, Revision 7, Pacific Northwest Laboratory, 1995, Richland, Washington.

c. **Proposed measures to reduce or control impacts, if any:**

None.

14. **Transportation**

a. **Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

Does not apply.

b. **Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

The Hanford Site is a controlled location and public transportation is not allowed to the site.

c. **How many parking spaces would the completed project have? How many would the project eliminate?**

None.

d. **Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).**

No.

e. **Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

No.

f. **How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

None.

g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any:

None.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:

Currently the site uses electricity, water, refuse service, telephone, sanitary sewer, septic systems and other utilities.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.

SIGNATURES

The above answers are true and complete to the best of my knowledge. We understand that the lead agency is relying on them to make its decision.

J. E. Rasmussen

J. E. Rasmussen, Director,
Environmental Assurance Permits
and Policy Division
U.S. Department of Energy
Richland Operations Office

11/7/95
Date